MST Your solutions

MST Sp. z o.o. Sp. k.
Chrobrego 8, 11-400 Kętrzyn, Poland
www.mst.pl

Round LED modules 315mm

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Other CCT and CRI on request

RdLED CRI 80 CJ G4

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux[1] ϕ [lm]	Useful luminous flux[2] [lm]	Voltage[1] Vf [V]	Power[1] P [W]	Efficacy[1] [lm/W]	Current minimum If min[3] [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 315mm 4000lm 830 24V EMG CJ G4	1010 137 60146	3000	960	3944	4045	22	21	191	160	4800	C
Emergency circuit			420	215	220	2.7	1.1	190	60	1800	
RdLED 315mm 4000lm 830 24V EMG SSW CJ G4	1010 137 60246		960	3944	4045	22	21	191	160	4800	C
Emergency circuit			420	215	220	2.7	1.1	190	60	1800	
RdLED 315mm 4000lm 840 24V EMG CJ G4	1010 137 46946	4000	960	4102	4207	22	21	199	160	4800	B
Emergency circuit			420	223	229	2.7	1.1	197	60	1800	
RdLED 315mm 4000lm 840 24V EMG SSW CJ G4	1010 137 60346		960	4102	4207	22	21	199	160	4800	B
Emergency circuit			420	223	229	2.7	1.1	197	60	1800	

RdLED CRI 80 CN G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux[1] ϕ [lm]	Useful luminous flux[2] [lm]	Voltage[1] Vf [V]	Power[1] P [W]	Efficacy[1] [lm/W]	Current minimum If min[3] [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 315mm 4000lm 830 24V EMG CN G3	1010 147 68846	3000	995	3912	4048	22	22	182	160	3200	C
Emergency circuit			450	220	227	2.7	1.2	179	60	1200	
RdLED 315mm 4000lm 830 24V EMG SSW CN G3	1010 147 36446		995	3912	4048	22	22	182	160	3200	C
Emergency circuit			450	220	227	2.7	1.2	179	60	1200	
RdLED 315mm 4000lm 840 24V EMG CN G3	1010 147 68946	4000	995	4127	4271	22	22	192	160	3200	C
Emergency circuit			450	232	240	2.7	1.2	189	60	1200	
RdLED 315mm 4000lm 840 24V EMG SSW CN G3	1010 147 36546		995	4127	4271	22	22	192	160	3200	C
Emergency circuit			450	232	240	2.7	1.2	189	60	1200	

RdLED CRI 80 LG G2

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux[1] ϕ [lm]	Useful luminous flux[2] [lm]	Voltage[1] Vf [V]	Power[1] P [W]	Efficacy[1] [lm/W]	Current minimum If min[3] [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 315mm 4000lm 830 24V EMG LG G2	1010 147 68646	3000	1040	3947	4071	22	23	172	160	3200	C
Emergency circuit			450	210	216	2.8	1.2	168	60	1200	
RdLED 315mm 4000lm 830 24V EMG SSW LG G2	1010 147 69446		1040	3947	4071	22	23	172	160	3200	C
Emergency circuit			450	210	216	2.8	1.2	168	60	1200	
RdLED 315mm 4000lm 840 24V EMG LG G2	1010 147 68746	4000	1040	4193	4325	22	23	183	160	3200	C
Emergency circuit			450	223	230	2.8	1.2	178	60	1200	
RdLED 315mm 4000lm 840 24V EMG SSW LG G2	1010 147 69546		1040	4193	4325	22	23	183	160	3200	C
Emergency circuit			450	223	230	2.8	1.2	178	60	1200	

MST Sp. z o.o. Sp. k.
Chrobrego 8, 11-400 Kętrzyn, Poland
www.mst.pl

Round LED modules 315mm

RdLED CRI 90 EH1.1 G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux[1] ϕ [lm]	Useful luminous flux[2] [lm]	Voltage[1] Vf [V]	Power[1] P [W]	Efficacy[1] [lm/W]	Current minimum If min[3] [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 315mm 4000lm 927 24V EMG EH1.1 G3	1010 117 42546	2700	1070	3938	4057	23	24	162	160	2400	D
Emergency light			450	206	212	2.9	1.3	159	60	900	
RdLED 315mm 4000lm 930 24V EMG EH1.1 G3	1010 117 42646	3000	1070	3938	4057	23	24	162	160	2400	D
Emergency light			450	206	212	2.9	1.3	159	60	900	
RdLED 315mm 4000lm 940 24V EMG EH1.1 G3	1010 117 42746	4000	1070	4185	4311	23	24	172	160	2400	D
Emergency light			450	218	225	2.9	1.3	168	60	900	

[1]At nominal current and Tp
[2]At nominal current and 25°C
[3]It is recommended not to operate below minimum current in order to avoid un-even brightness
Tolerance range for optical and electrical ±10%

Temperature & humidity

Specification item	Unit	Value
Tp	[°C]	45
Tp rated	[°C]	65
Tc	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condesing)	[%]	5 ... 85

Tp - Temperature related to the performance parameters of the LED modules
Tp rated - Maximum operating temperature to which the rated performance characteristics are declared
Tc - Highest permissible value for safe operation

Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

Color coordinates

According to CIE 1931

Specification item	CIEx	CIEy
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

Certificates & standards

Specification item	Compliant
ENEC	Yes
CE	Yes
RoHS	Yes
REACH	Yes
IP rating	No IP rating

MST Sp. z o.o. Sp. k.
Chrobrego 8, 11-400 Kętrzyn, Poland
www.mst.pl

Round LED modules 315mm

Lumen maintenance

for LE G5, LG G2, LA G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	55°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	65°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	75°C	>100 000	>100 000	>100 000	>100 000	>100 000	98 000
	85°C	>100 000	>100 000	>100 000	>100 000	81 000	73 000
If max	45°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	55°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	65°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	75°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	85°C	>100 000	>100 000	92 000	87 000	45 000	42 000

Calculated data based on LM80 LED data (12 000h)

Lumen maintenance

for EH1.1 G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>72 000	>72 000	>72 000	>72 000	64 000	60 000
	55°C	>72 000	>72 000	>72 000	>72 000	63 000	59 000
	65°C	>72 000	>72 000	>72 000	>72 000	62 000	57 000
	75°C	>72 000	>72 000	>72 000	>72 000	60 000	56 000
	85°C	>72 000	>72 000	>72 000	>72 000	59 000	55 000
If max	45°C	>72 000	>72 000	67 000	62 000	30 000	29 000
	55°C	>72 000	>72 000	66 000	61 000	30 000	28 000
	65°C	>72 000	>72 000	65 000	60 000	29 000	27 000
	75°C	>72 000	>72 000	65 000	59 000	29 000	26 000
	85°C	>72 000	>72 000	64 000	58 000	28 000	26 000

Calculated data based on LM80 LED data (12 000h)

for CJ G4, CN G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	89 000	88 000
	75°C	>102 000	>102 000	>102 000	>102 000	75 000	74 000
	85°C	>102 000	>102 000	>102 000	>102 000	64 000	63 000
If max	45°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C	>102 000	>102 000	>102 000	>102 000	90000	89000
	65°C	>102 000	>102 000	>102 000	>102 000	77 000	76 000
	75°C	>102 000	>102 000	>102 000	>102 000	65 000	64 000
	85°C	>102 000	>102 000	>102 000	>102 000	55 000	54 000

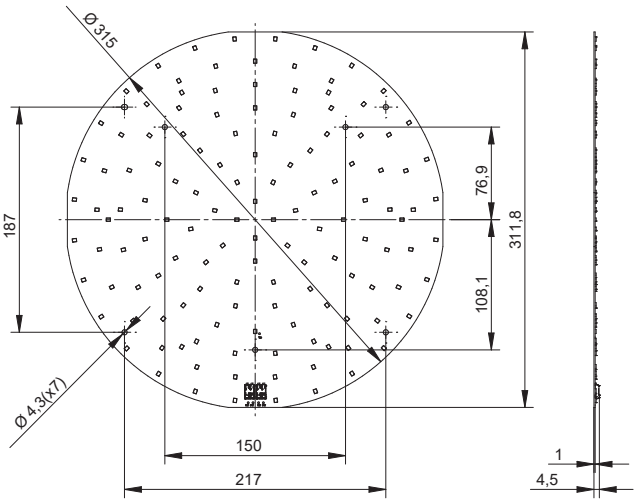
Reported data based on LM80 LED data (17 000h)

MST Sp. z o.o. Sp. k.
Chrobrego 8, 11-400 Kętrzyn, Poland
www.mst.pl

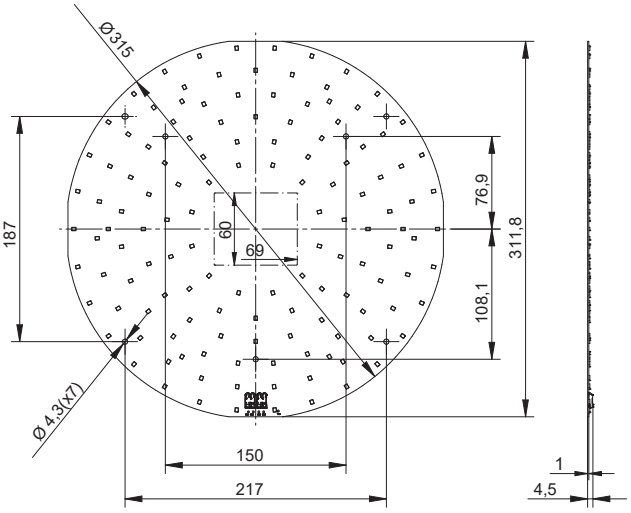
Round LED modules 315mm

Dimensions

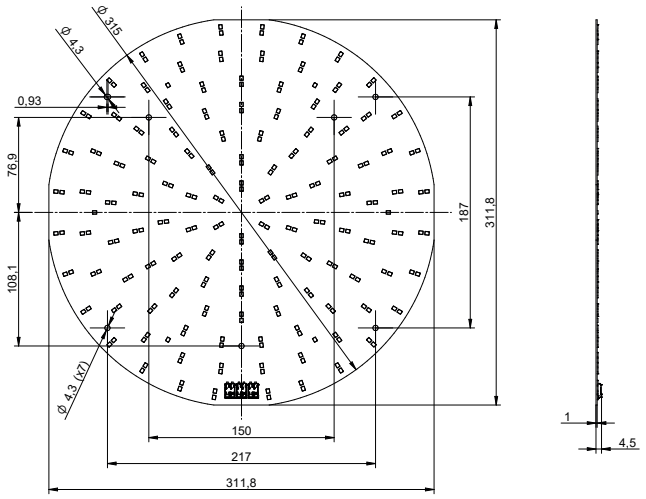
RdLED 315mm



RdLED 315mm SSW



RdLED 315mm TW



Mounting

LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepeage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

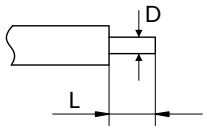
LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

MST Sp. z o.o. Sp. k.
Chrobrego 8, 11-400 Kętrzyn, Poland
www.mst.pl

Round LED modules 315mm

Wiring

Wire cross section and strip length:

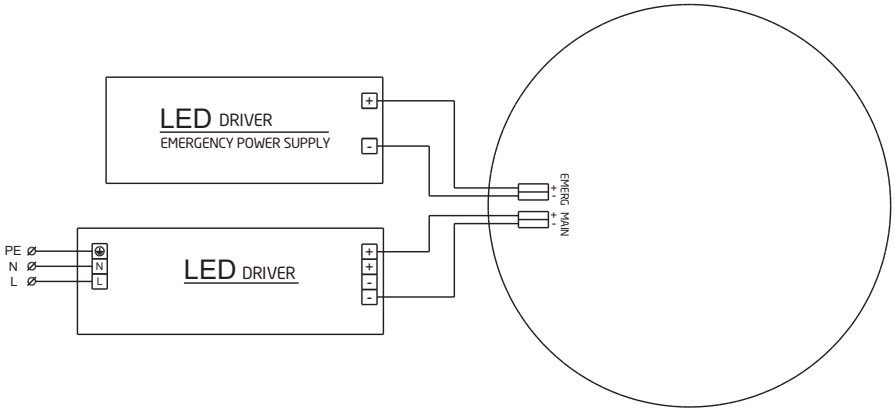


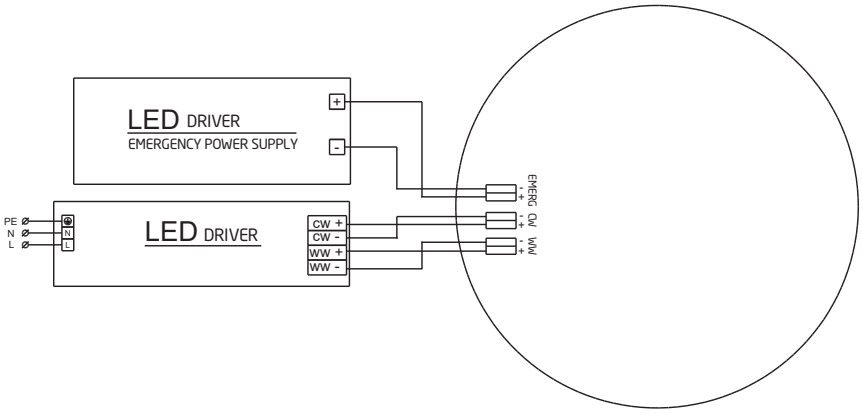
D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm²	0.75mm²
	AWG 24	AWG 18

L - strip length	Min	Max
	8mm	9mm

Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:

Connections





Energy Label / EPREL database

To obtain Energy Label for this product visit https://eprel.ec.europa.eu/ and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

MST Sp. z o.o. Sp. k.
Chrobrego 8, 11-400 Kętrzyn, Poland
www.mst.pl

Round LED modules 315mm

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 315mm 4000lm 830 24V EMG CJ G4	1010 137 60146	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 830 24V EMG SSW CJ G4	1010 137 60246	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 840 24V EMG CJ G4	1010 137 46946	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 840 24V EMG SSW CJ G4	1010 137 60346	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 830 24V EMG CN G3	1010 147 68846	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 830 24V EMG SSW CN G3	1010 147 36446	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 840 24V EMG CN G3	1010 147 68946	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 840 24V EMG SSW CN G3	1010 147 36546	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 830 24V EMG LG G2	1010 147 68646	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 830 24V EMG SSW LG G2	1010 147 69446	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 840 24V EMG LG G2	1010 147 68746	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 840 24V EMG SSW LG G2	1010 147 69546	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 927 24V EMG EH1.1 G3	1010 117 42546	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 930 24V EMG EH1.1 G3	1010 117 42646	12	1008	363 x 363 x 58
RdLED 315mm 4000lm 940 24V EMG EH1.1 G3	1010 117 42746	12	1008	363 x 363 x 58